

MIC2 (C-20): sc-9527

BACKGROUND

MIC2 (also designated CD99) is a T cell surface protein that is involved in the aggregation of lymphocytes. Two forms of MIC2, which are differentially expressed, are produced by alternative splicing. The major form induces cellular adhesion, whereas the truncated form inhibits the adhesion process. MIC2 regulates the LFA-1/ICAM-1-mediated adhesion of lymphocytes. Over-expression of the truncated form results in down-regulated expression of LFA-1. Cells with down-regulated MIC2 exhibit a Hodgkin's and Reed-Sternberg (H-RS) phenotype, indicating that MIC2 plays an important role in regulating cell function and morphology.

REFERENCES

- Banting, G.S. et al. 1989. The MIC2 gene product: epitope mapping and structural prediction analysis define an integral membrane protein. *Mol. Immunol.* 26: 181-188.
- Gelin, C. et al. 1989. The E2 antigen, a 32 kDa glycoprotein involved in T cell adhesion processes, is the MIC2 gene product. *EMBO J.* 8: 3253-3259.
- Hahn, J.H. et al. 1997. CD99 (MIC2) regulates the LFA-1/ICAM-1-mediated adhesion of lymphocytes, and its gene encodes both positive and negative regulators of cellular adhesion. *J. Immunol.* 159: 2250-2258.
- Choi, E.Y. et al. 1998. Engagement of CD99 induces up-regulation of TCR and MHC class I and II molecules on the surface of human thymocytes. *J. Immunol.* 161: 749-754.
- Kim, S.H. et al. 1998. Generation of cells with Hodgkin's and Reed-Sternberg phenotype through downregulation of CD99 (MIC2). *Blood* 92: 4287-4295.
- Wingett, D. et al. 1999. A role for CD99 in T cell activation. *Cell. Immunol.* 193: 17-23.

CHROMOSOMAL LOCATION

Genetic locus: CD99 (human) mapping to Xp22.32; Yp11.3.

SOURCE

MIC2 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of MIC2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-9527 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

MIC2 (C-20) is recommended for detection of MIC2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for MIC2 siRNA (h): sc-35933, MIC2 shRNA Plasmid (h): sc-35933-SH and MIC2 shRNA (h) Lentiviral Particles: sc-35933-V.

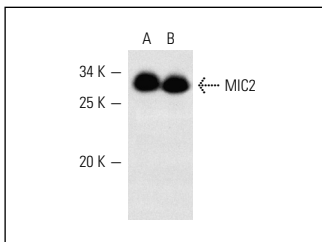
Molecular Weight of MIC2: 32 kDa.

Positive Controls: CCRF-CEM cell lysate: sc-2225, HuT 78 whole cell lysate: sc-2208 or MOLT-4 cell lysate: sc-2233.

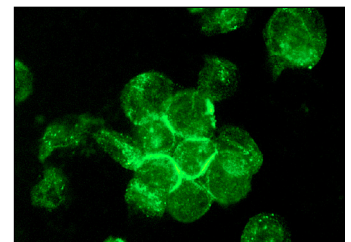
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



MIC2 (C-20): sc-9527. Western blot analysis of MIC2 expression in CCRF-CEM (A) and HuT 78 (B) whole cell lysates.



MIC2 (C-20): sc-9527. Immunofluorescence staining of methanol-fixed CCRF-CEM cells showing membrane staining.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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Try **MIC2 (12E7): sc-53148** or **MIC2 (F-8): sc-28389**, our highly recommended monoclonal alternatives to MIC2 (C-20).